

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| Applicant: | Moore, et al | |
| Serial No: | To Be Assigned | Examiner: To Be Assigned |
| Filed: | Herewith | Group Art Unit: To Be Assigned |
| For: | VACUUM ULTRA-VIOLET TRANSMITTING SILICON OXYFLUORIDE LITHOGRAPHY GLASS | |

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.56, 1.97 – 1.98**

Commissioner of Patents
Alexandria, VA 22313-1450

Dear Sir:

The Examiner's attention is hereby directed to the following reference(s) listed on the attached Form PTO-1449 for consideration in connection with the examination of the above-identified patent application. A copy of each of the reference(s) is enclosed unless it was previously submitted in related U.S. Application Nos. 09/997, 785, 09/799,987 and 09/397,573 in a corresponding applications.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the enclosed documents constitute "prior art." If it should be determined that any of the submitted documents do not constitute "prior art" under United States law, applicant(s) reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

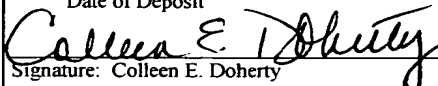
Applicant(s) further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the enclosed references, should one or more of the references be applied against the claims of the present application.

Respectfully submitted,



Siwen Chen
Limited Recognition
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Date: November 5, 2003

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| <p>CERTIFICATE OF EXPRESS MAIL UNDER 37 CFR 1.10 I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the dated indicated below and is addressed to Commissioner of Patents, Alexandria, VA 22313-1450 on</p> <p align="center"><u>11-05-03</u> Date of Deposit</p> <p> Signature: Colleen E. Doherty</p> <p>Express Mail Label No. EV 327188413 US</p> |
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| FORM PTO-1449 (MODIFIED) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS INFORMATION DISCLOSURE STATEMENT | ATTORNEY DOCKET NO. | | SERIAL NO. |
| | Moore 7-6C | | To Be Assigned |
| | APPLICANT Moore et al. | | |
| | FILING DATE Herewith | GROUP: To Be Assigned | |

| REFERENCE DESIGNATION | | | | U.S. PATENT DOCUMENTS | | | |
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| | AA | 1,283,333 | 10/29/18 | Shaw | | | |
| | AB | 2,188,121 | 1/23/40 | Smith | 47 | 78.1 | |
| | AC | 3,740,207 | 6/19/73 | Bogrets et al. | 65 | 67 | |
| | AD | 3,933,454 | 1/20/76 | DeLuca | 65 | 3 | |
| | AE | 4,221,825 | 9/9/80 | Guerder et al. | 427 | 34 | |
| | AF | 4,345,928 | 8/24/82 | Kawachi et al. | 65 | 18.2 | |
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| | AI | 4,650,511 | 3/17/87 | Koya et al. | 65 | 30.1 | |
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| | AK | 4,789,389 | 12/6/88 | Schermerhorn et al. | 65 | 31.2 | |
| | AL | 4,917,718 | 4/17/90 | Berkey | 65 | 108 | |
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| | AP | 5,410,428 | 4/25/95 | Yamagata et al. | 359 | 350 | |
| | AQ | 5,415,953 | 5/16/95 | Alpay et al. | 430 | 5 | |
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| REFERENCE DESIGNATION | | U.S. PATENT DOCUMENTS | | | | | |
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| Examiner Initial | | Document Number | Date | Name | Class | Sub-Class | Filing Date if Approp. |
| | AA1 | 5,698,484 | 12/16/97 | Maxon | 501 | 54 | |
| | AB1 | 5,702,495 | 12/30/97 | Hiraiwa et al. | 65 | 17.1 | |
| | AC1 | 5,702,847 | 12/30/97 | Tarumoto et al. | 430 | 5 | |
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| | AE1 | 5,735,921 | 4/7/98 | Araujo et al. | 65 | 32.1 | |
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| | | Document Number | Date | Country | Class | Sub-Class | Translation Yes No |
| | AA | 98/27018 | 6/25/98 | PCT | C03B | 19/14 | X |
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| | AK | 2,704,015 A1 | 8/3/78 | Germany | C03B | 23/04 | X |
| | AL | 63-210044 | 8/31/88 | Japan | C03C | 17/245 | X |
| | AM | 1-138145 | 5/31/89 | Japan | | | X |
| | AN | 62-235223 | 10/15/87 | Japan (abstract) | C03B | 20/00 | X |
| | AO | 67/22389 | 11/1/67 | Japan | | | X |

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OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

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| | AA | Douglas Allan, Charlene Smith, N.F. Borrelli and T. P. Seward III, <i>193-nm excimer-laser-induced densification of fused silica</i> , OPTICS LETTERS/Vol. 21, No. 24/December 15 1996, pp. 1960-1962 |
| | AB | Roger J. Araujo, Nicholas F. Borrelli and Charlene Smith, <i>INDUCED ABSORPTION IN SILICA (A PRELIMINARY MODEL)</i> , SPIE Vol. 3424, 1998, pp. 25-32. |
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| | AE | J.W. Fleming and D.L. Wood, <i>refractive index dispersion and related properties in fluorine doped silica</i> , APPLIED OPTICS/Vol. 22, No. 19/ October 1, 1983, pp.3102-3104. |
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| | AG | Hideo Hosono, Masafumi Mizuguchi, and Hiroshi Kawazoe, <i>Effects of fluorine dimer excimer laser radiation on the optical transmission and defect formation of various types of synthetic SiO₂ glasses</i> , APPLIED PHYSICS LETTERS, Vol. 74, No. 19, 10 May 1999, pp. 2755-2757. |
| | AH | Toshio Ibuki et al., <i>ABSORPTION SPECTRA OF SiCl₄, SiCl₆, SiF₃CH₃ AND GeF₄ IN THE VUV REGION</i> , Chemical Physics Letters, Vol. 136, No. 5, 15 May 1987, pp. 447-450. |
| | AI | W.D. Kingery, H.K. Brown, and D. R. Uhlmann, <i>Introduction to Ceramics, Second Edition</i> , John Wiley & Sons, 1976. pg. 654. |
| | AJ | M. Kyoto, Y. Ohoga, S. Ishikawa, Y. Ishiguro, <i>Research and Development Group, Sumitomo Electric Industries Ltd</i> , 1993 Chapman and Hall, pp. 2738-2744. |
| | AK | I. H. Malitson, <i>Interspecimen Comparison of the Refractive Index of Fused Silica</i> , Journal of the Optical Society of America, Vol. 55, No. 10, pp. 1205-1209. |
| | AL | James A. McClay and Angela S.L. McIntyre, <i>157 nm optical lithography: The accomplishments and the challenges</i> , Solid State Technology, June 1999, pp. 57-68. |
| | AM | Taro Moritani et al., "Glass Engineering Handbook," April 20, 1964, Asakura Shoten, p. 611, Clause 2.1 Fabrication., |

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| | AN | M. Rothschild, D.J. Ehrlich & D.C. Shaver, <i>Effects Of Excimer Laser Irradiation On The Transmission, Index Of Refraction, And Density Of Ultraviolet Grade Fused Silica</i> , Appl. Phys. Lett 55(13) 9/25/99, pp. 1276-1278 |
| | AO | Charlene M. Smith, Lisa A. Moore, <i>Fused Silica for 157 nm Transmittance</i> , SPIE Vol. 3676, 15-17 March 1999, pp. 834-841. |
| | AP | D.R. Sempolinski, T.P. Seward, C. Smith, N. Borrelli, C. Rosplock, <i>Effects of Glass Forming conditions on the KrF-Excimer-Laser-Induced Optical Damage In Synthetic Fused Silica</i> , Journal of Non-Crystalline Solids 203 (1996) pp. 69-77 |
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| | AR | Richard E. Schenker & William G. Oldham, <i>Ultraviolet-induced Densification In Fused Silica</i> , J. Appl. Phys. 82 (3), 1 August 1997, pp. 1065-1071 |
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| | AW | PTO: 96-0383, Journal, Title: Sheet Glass |
| | AX | Corning HPFS [®] , ArF Grade, Product Literature, 1999 |
| | AY | Shin-Etsu Chemical Homepage, Semiconductor Materials Division, http://www.shinetsu.co.jp/english/profile/division/sem-div/sem-div.html , (5/17/99) pp. 1-2 |
| | AZ | Purity and Chemical Reactivity, Isimoto Co., Ltd. Homepage, Purity and Chemical Reactivity, http://www.isimoto.com/isimoto/english/feature1.html , (5/17/99) pp. 1-3 |

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| | AM | 0 835 848 A2 | 4/15/98 | EPC | | | | |
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| | AO | 07-291635 | 11/7/95 | JAP | | | X | |
| | AP | | | | | | | |
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| | AA1 | | Products for Optics, Isimoto Co., Ltd. Homepage, http://www.isimoto.com/isimoto/english/variation 3.html , (5/17/99) pp. 1-2 |
| | AB1 | | Product Information, Isimoto Co., Ltd. Homepage, http://www.isimoto.com/isimoto/english/product info.html , (5/17/99) pp. 1-4 |

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